



सत्यमेव जयते

Ministry of Commerce & Industry
Government of India



Logistics Data Bank (LDB) and Unified Logistics Interface Platform (ULIP)



Timeline:

50+
MILLION
EXIM CONTAINERS TRACKED
JULY 2016 - JULY 2022

Mar 2013: Go-ahead
from DMIC Trust

Dec 2015: SPV
(NLDS) incorporated

Oct 2014: TAMP issued
notification for MUC (3yrs
from LDB launch)

2009: METI, Japan initiated smart community
pre-feasibility study in DMIC region

Apr 2017: LDB
launched at APSEZ

Jul 2016: LDB
launched at JNPT

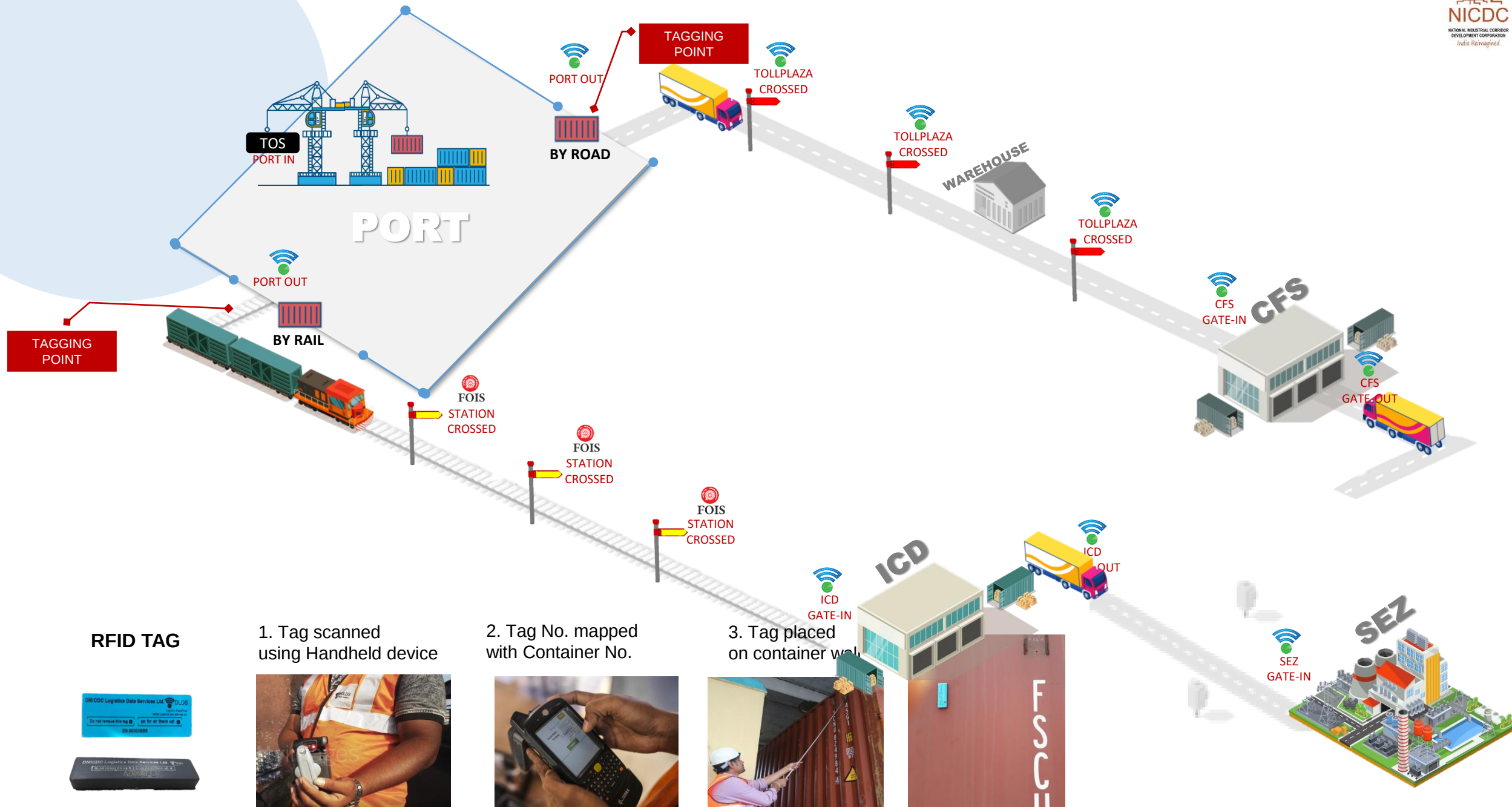
Nov-Dec 2018: LDB launch
at most of Major Ports

Dec 2017: Pan India
Launch announcement

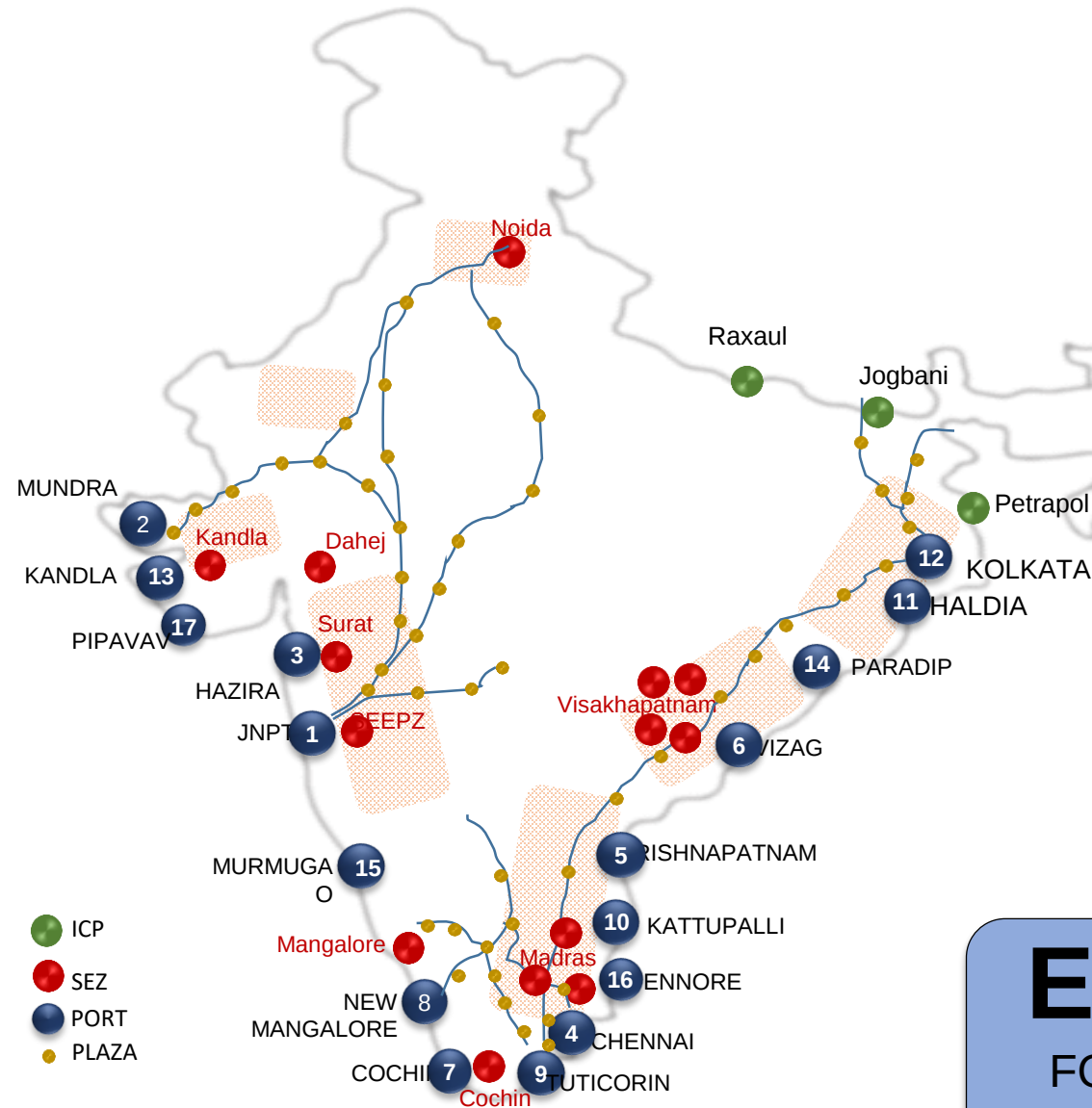
Aug 2019: TAMP
extension for 2Yrs.

Nov 2020: With
Pipavav Go-Live,
100% Coverage

LDB Operational Flow:



LDB's Coverage:



17 PORTS (27 TERMINALS)

70 TOLL PLAZAS

341 CFS/ICD/EY/PP

14 SPECIAL ECONOMIC ZONES

3 INTEGRATED CHECK POSTS

MAJOR CARGO RAIL ROUTES & DFCs

EDI WITH
FOIS, PCS &
TERMINALS

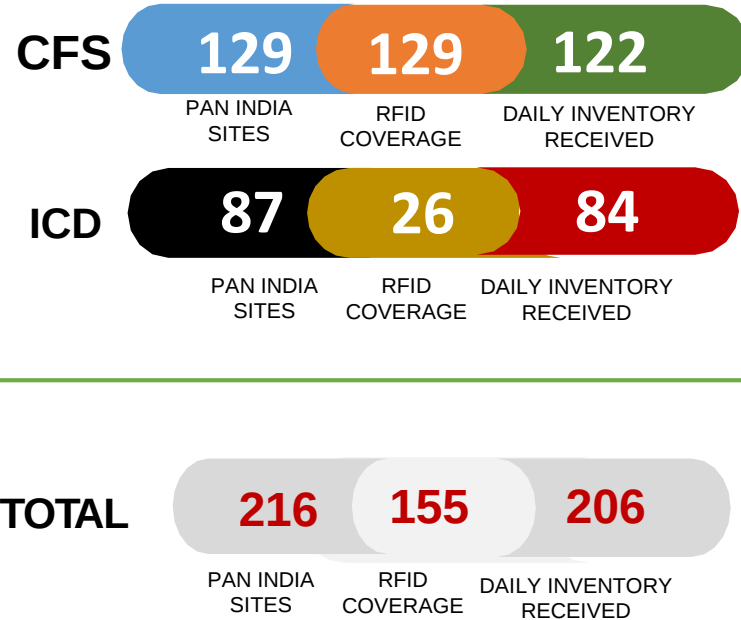
2250+
RFID READERS

55M+
CONTAINERS
HANDLED

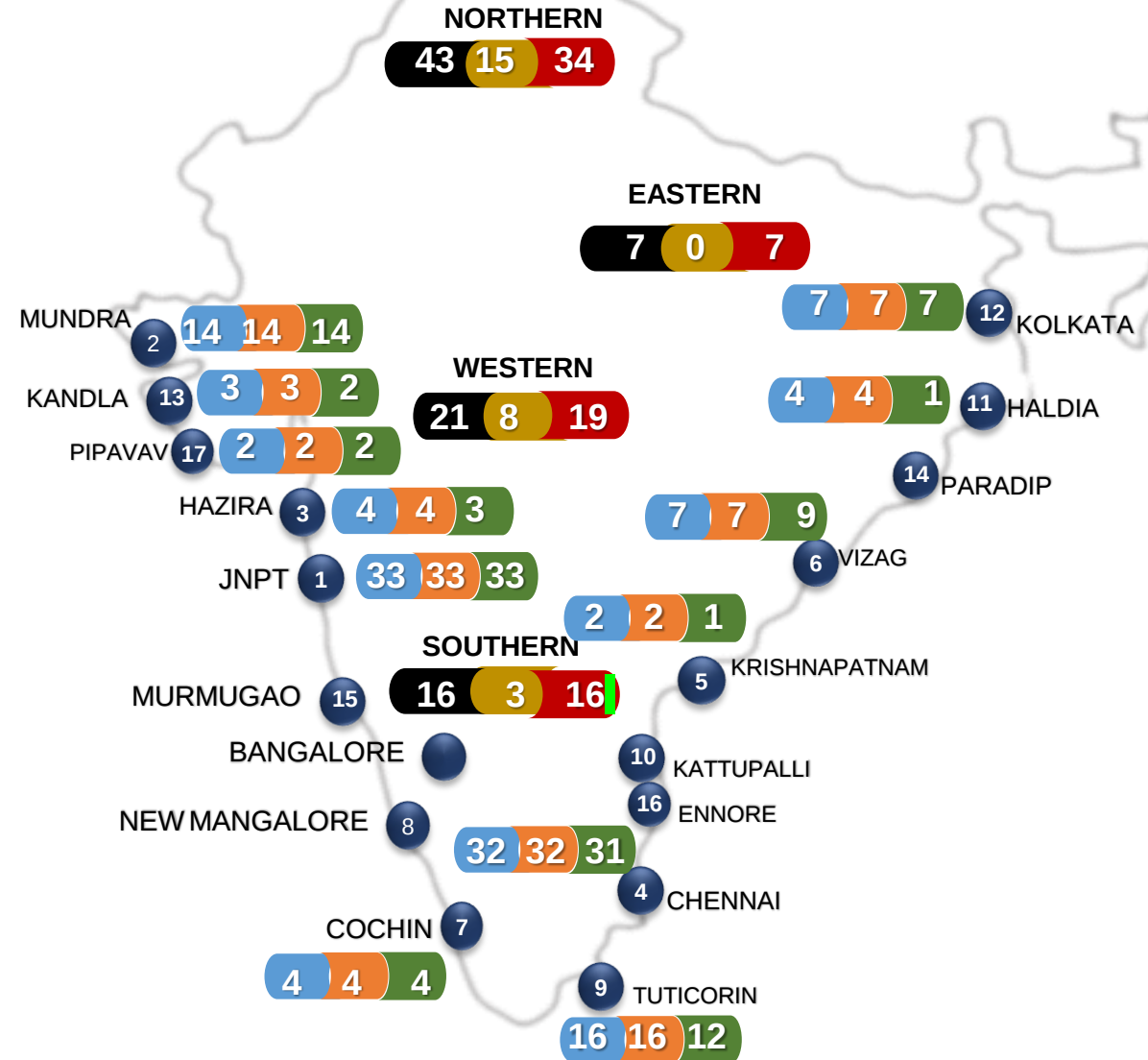
CFS: Container Freight Station, ICD: Inland container Depot, EY: Empty Yard, PP: Parking Plaza

CFS/ICD Coverage – LDB

Pan India



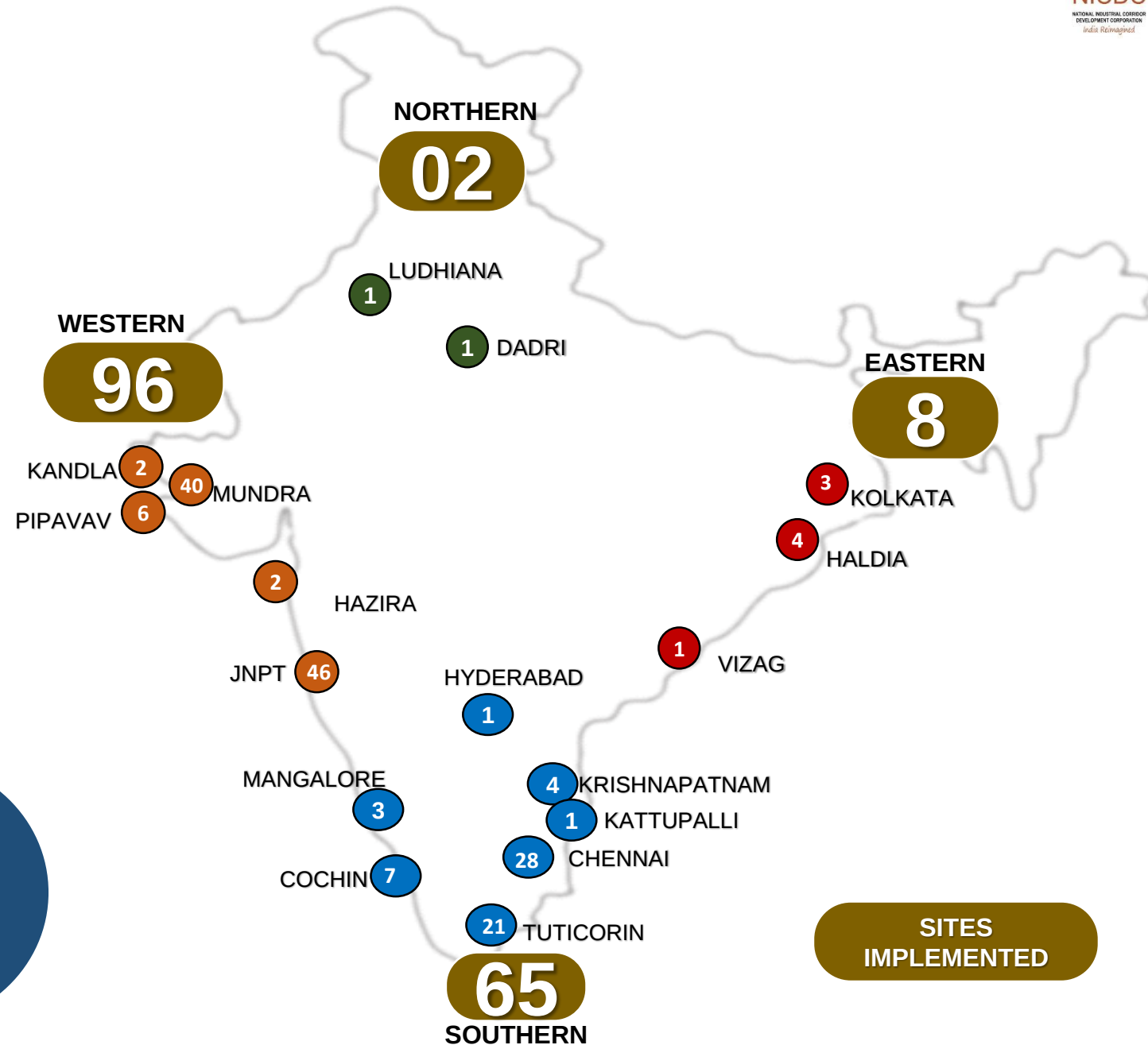
- Permission awaited for ICDs managed by CONCOR
- Inventory data currently received over email, soon to be automated through NLP Marine



Pan India Empty Yard Coverage:

- ❑ Site survey done: **210** Empty Yards
- ❑ Total **171** Empty Yards covered under LDB.
- ❑ **39** sites found unsuitable.

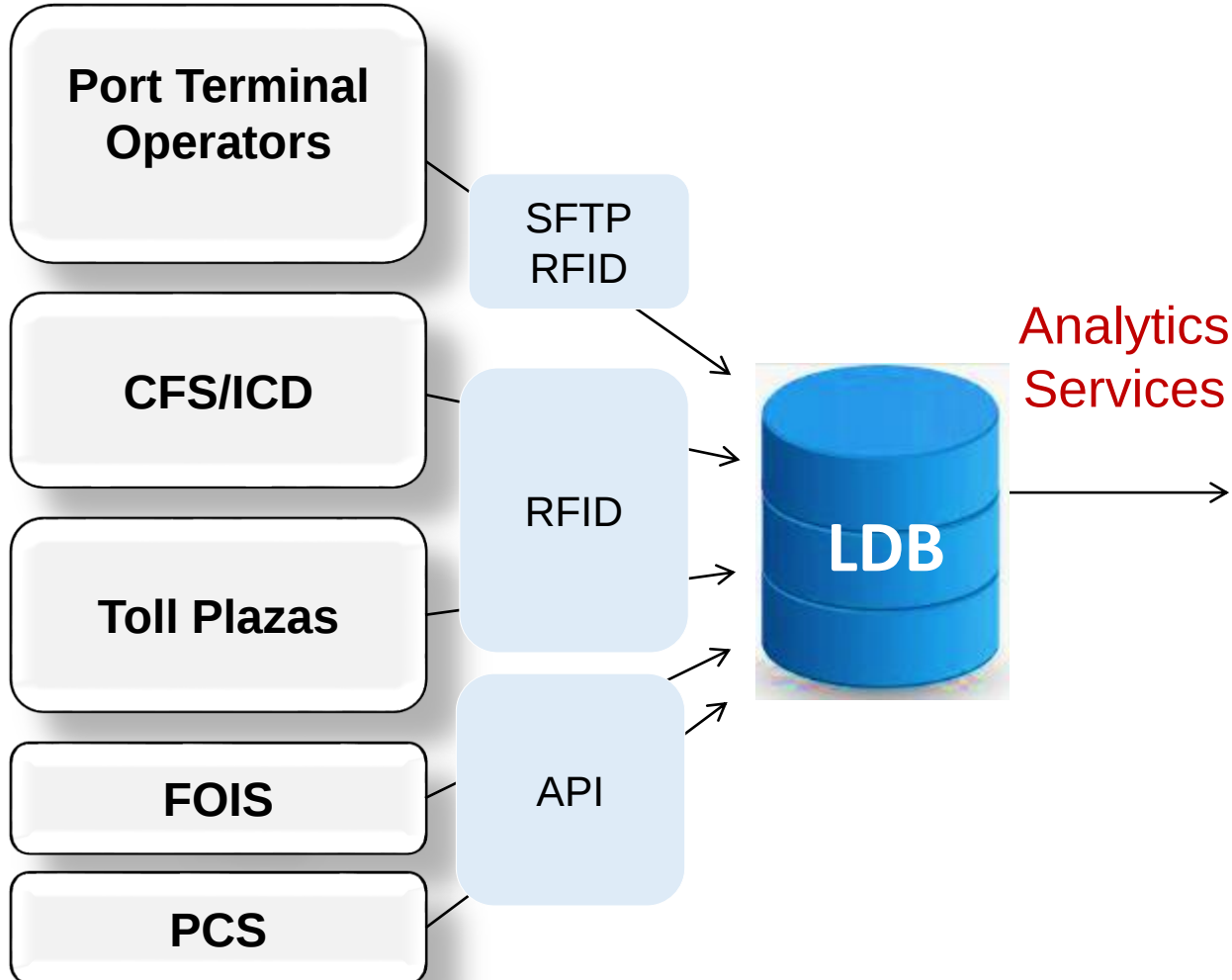
Approx.
80%
Empty
Containers



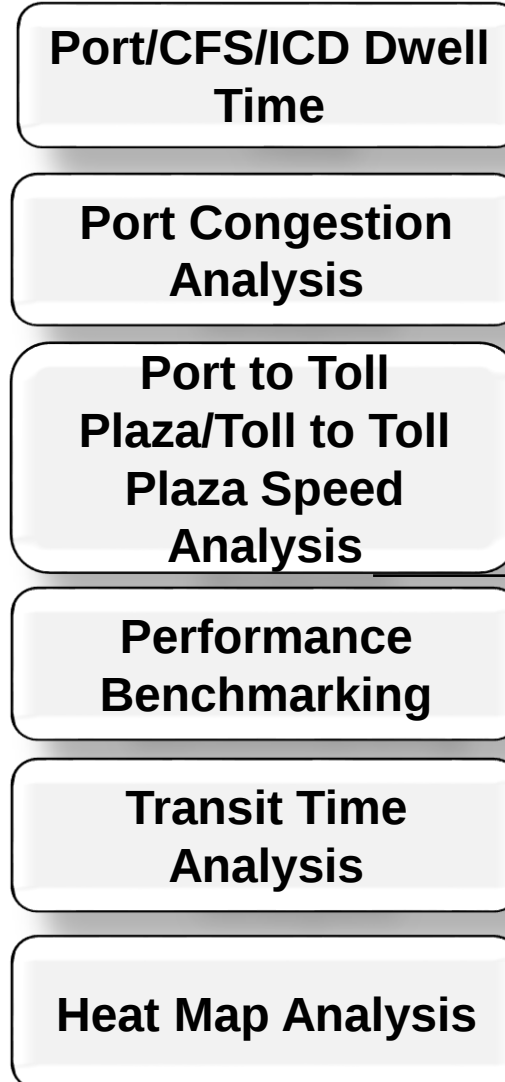
LDB Analytics:

Input Stakeholders

Container Information Data Collection



Analytics



Output



LDB Value addition:

Before LDB

Importers/Exporters dependent on multiple stakeholders for info on their containers

Systems were silos, without real-time information exchange

No database available for decision making

No performance benchmarking for encouraging competition and transparency



With LDB

Single window platform with access to all

Integrated Ports, CFS/ICDs, Yards, Rail and road network.

Rich data set of ports, yards, highways and railways accumulating since 2016

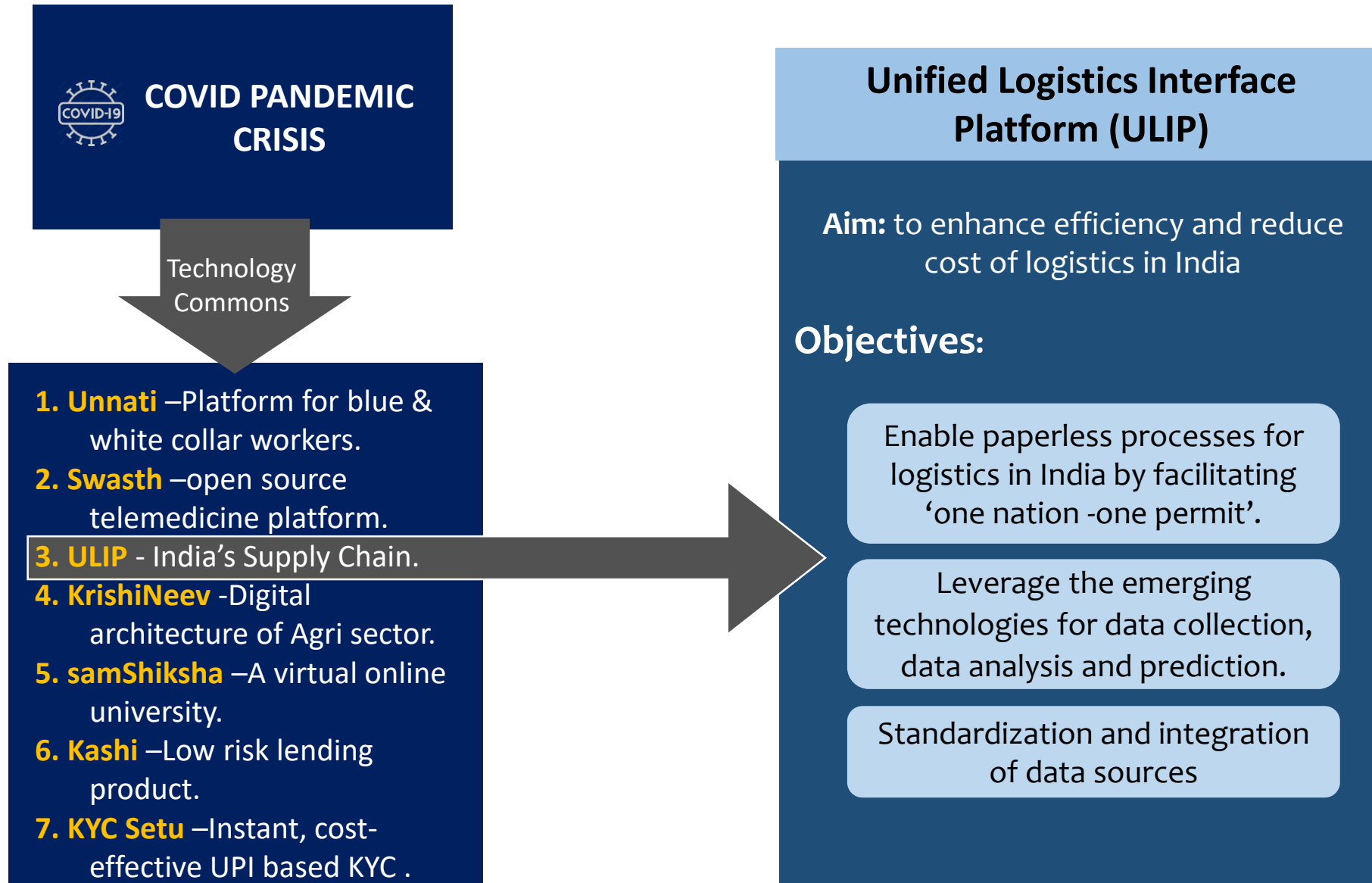
Technology driven analytics with performance comparison

Key Milestones and Achievements:

- 1 LDB tracking **100%** of India's EXIM containers and achieved **5 crore** milestone.
- 2 Nearly **30 Lakh** containers searched every months on LDB portal.
- 3 Technology driven **performance benchmarking** for entire container ecosystem available for the trade for decision making.
- 4 Coverage at **Empty and maintenance yards**, one of the most unorganized in EXIM logistics.
- 5 Supporting Govt. initiatives for **container manufacturing in India**.
- 6 Extending services for visibility of **domestic/coastal container** movement.

Unified Logistics Interface Platform (ULIP)

Technology Commons: PM's vision



ULIP Phasing Strategy

COMPLETED

Phase 1

Logistics Gateway

Integrate the **information** available with various government systems across the supply chain.



Multimodal Coverage

Help in taking informed decision with availability of **seamless track and trace** information for multi-modal logistics.

Phase 2



Unified System for Documentation & Compliance

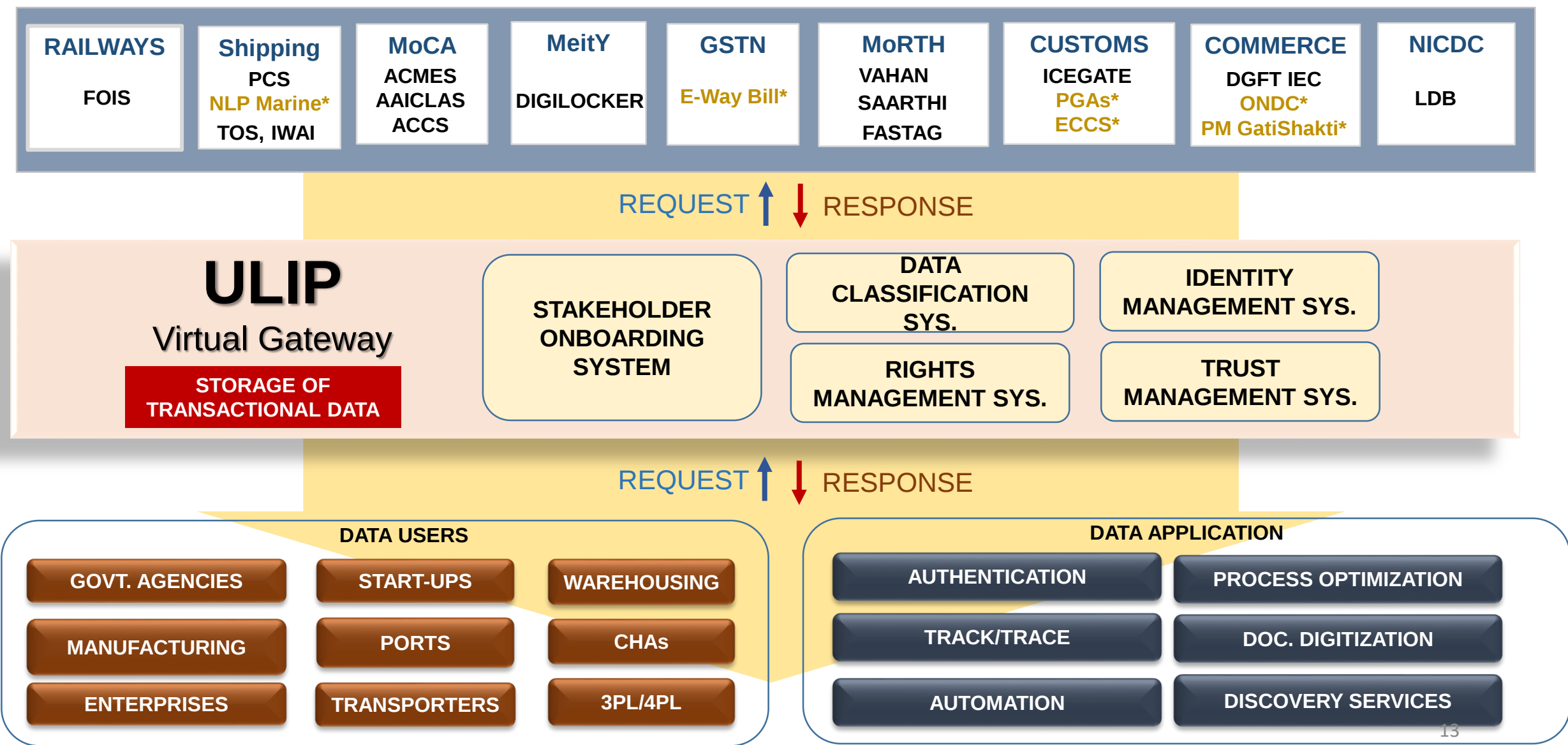
Single stop access to all compliance requirements, document filing, certifications and approval procedures



Public-Private Partnership

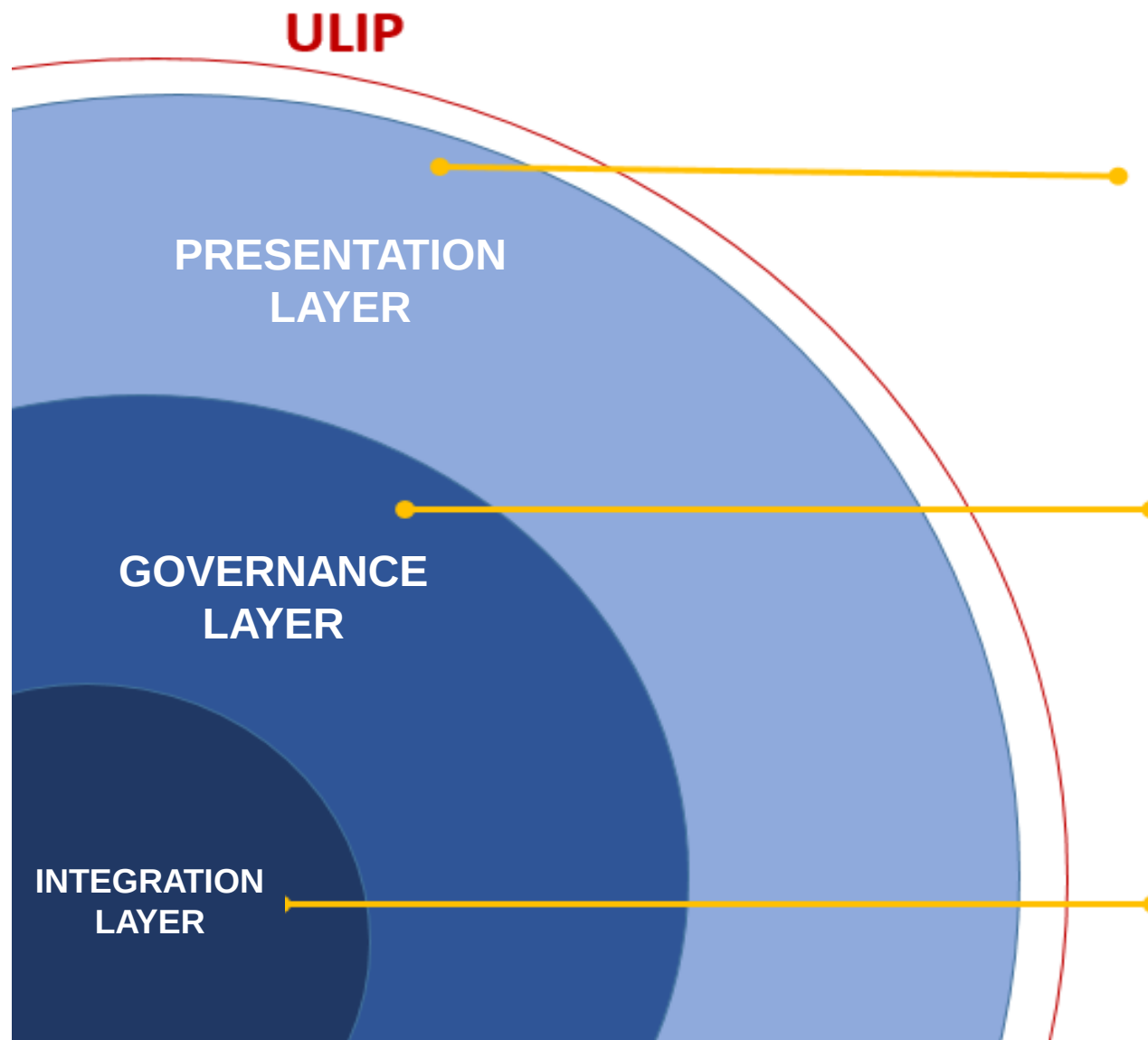
Gateway for data exchange between both government and private entities to **cross-leverage** each other's information

ULIP Architecture:



*Under Discussion

ULIP Ecosystem:



Collaborative community of users and data principals for value creation.

- Public/private actors creating new solutions
- End users utilizing user-facing applications
- Trade feedback

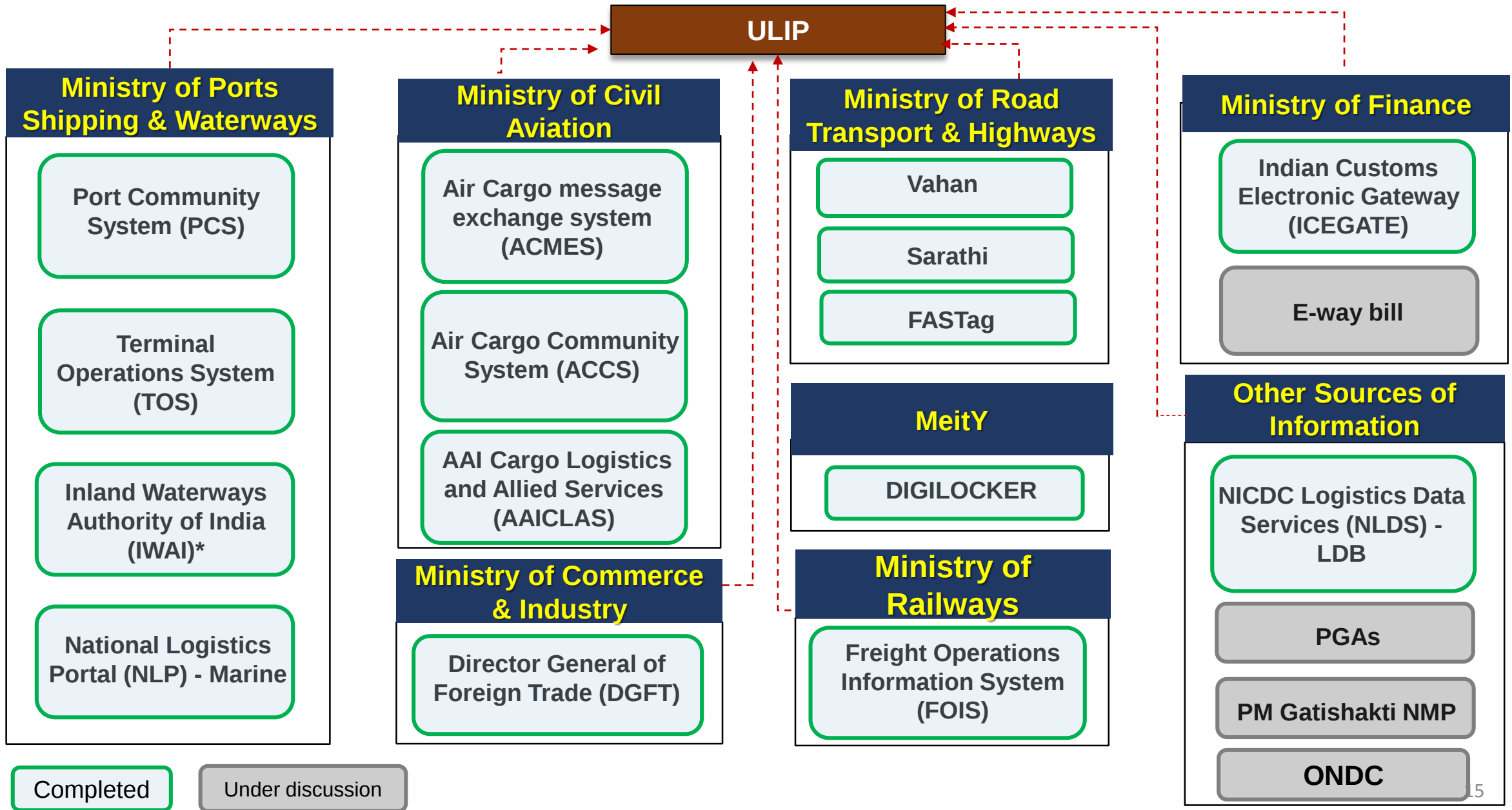
Laws and Rules to govern the Ecosystem and accountable the institutions.

- Platform Ownership / Access
- Data privacy and integrity
- Domain specific policies and standard

Digital infrastructure that facilitates delivery of the services and solutions.

- Modular application with APIs.
- Data exchanges / interoperability.
- Stack combining applications, protocols, registries.

Integration Status:



ULIP

	SYSTEMS	FIELDS	APIs
DGFT	IEC	15	1
IR	FOIS	8	1
MoRTH	VAHAN	41	3
	SARATHI	93	1
	FASTAG	7	1
MoCA	ACCS	80	2
	ACMES	63	2
	AAICLAS	63	2
NICDC	LDB	20	1
CUSTOMS	ICEGATE	50	8
IPA	PCS	229	16
MoPSW (TOS)	JNPT	62 x 13 ports	3 x 13 Ports
	CHENNAI		
	KOLKATA		
	KANDLA		
	MUMBAI		
	PARADIP		
	NMPT		
	TUTICORIN		
	COCHIN		
	GOA		
	HALDIA		
	KPL		
	VPT		
	ADANI PORTS	62	3
MoPSW (IWA)	CAR-D	69	9
	PANI	185	11
MeitY (DIGILOCKER)	CIN/DIN	20	2
	AADHAR/PAN	10	2
	GSTN	45	1

32
SYSTEMS

1600+
FIELDS

104+
APIs

Status Update:

330+

**Companies
registered on Portal**

83

**Companies submitted
use-cases**

206

Use-cases received

50

Companies signed NDA

5.7 Cr. +

API hits processed

50+

Associations consulted

6

**Consultation events
organized at diff. cities**



**Awarded “Geospatial
for Logistics”**

Data Governance:

- 1 Request response based system
- 2 Storage of only transactional data
- 3 No personal identified information shared
- 4 Developed on NODE guidelines of MeitY
- 5 Shared through secured method as defined by concerned ministries

NDA signed:

Logistics Service Providers



Industry Giants



Start-ups



ULIP In-house Use-cases



Use Case – 1: Know Your Transporter

Problem Statement

Manual Verification of Vehicle & Driver Details

- Unavailability of real time data

High Risk in Logistics Trade

- Duplicate driving licenses
- Unfit/unsecured vehicles

Solution

- Real-time verification of
 - **Vehicle Information:** Fitness, carrier type, manufacturing details, insurance, etc.
 - **Driver Information:** Status of driving license, permission category, validity, penalty, photo Id, etc.
- **Toolkit** developed for linking individual ERP's
- **Multi verification** by uploading excel

Additional Services

- Driver Behaviour Analysis and Risk Assessment
- Vehicle Audit Tool
- Driver Recruitment Tool
- Insurance Alert Tool

Integrations: VAHAN, SARATHI

Target User/ Companies

Third-Party
Logistics (3PL)

Shipping

Manufacturing

E-Commerce

Use Case – 2 Track Your Transport

Problem Statement

Market Dominated by Small Transporters

- 80% with fleet size <5 trucks

Low Service Quality

- Lack of visibility and transparency

Solution

- Universal road tracking without dependency on tracking device.
- Visibility across multimodal transport
- Route Optimization Planning
- SMS and Email notifications/alerts

Additional Services

- Demand Planning and business operations
- Efficient Route Planning.
- Fraud and Unauthorized Movement Detection.
- AIS 140 Compliant Tool

Integrations: FASTAG, EWAY-BILL (Optional), FOIS, ACCS, TOS

Target Users

Manufacturers

E-Commerce

Logistics Service Providers

Warehouse Agencies

Use Case – 3 LDB 2.0 (Tracking + Documentation flow)

Problem Statement

Unidentifiable Delays/
Bottlenecks

Clearance Visibility

- Complex and unintegrated documentation process

Solution

- Integrated Physical and Information Flow with map view
- Alerts for customs clearance, yard clearance, out of charge, etc.
- Analysis on source and impact of delays

Additional Services

- LDB’s Coverage Expansion.
- Enhanced Congestion Analysis and Route Planning.
- Better Accuracy of ETA

Target Users	Importer/ Exporter/ Domestic User	Port Authorities
	Freight Forwarder & CHA	Logistics Service Providers

Use Case – 4 Empty Carrier Discovery

Problem Statement

Lack of Carrier Visibility Leading to High Logistics Cost

- Untracked empty carriers with high movement
- Unorganized truck operators
- Unsystematic vehicle movements

Solution

- Real time carrier visibility
 - Low empty carrier movement
 - Empty carrier information visibility among stakeholders
- Optimized Transportation Cost
- Systematic and Organized Vehicle Movement
 - Available empty carriers under single umbrella

Additional Services

- Empty carrier discovery & booking
- Display on the top priority
- Vehicle compliance check
- Driver background check
- Map view

Integrations: VAHAN, SARATHI

Target Users

Vehicle owner, transporter, factory owners and other participants of the transportation segment

Use Case – 5 Empty Container Discovery

Problem Statement

Manual Process

- Lack of visibility of empty containers
- Untracked empty containers information
- High cost incurred due to outstation containers

Solution

- Real time empty container visibility
 - Low chances of container staying empty
 - Information visibility among stakeholders
- Optimized Transportation Cost
- Container utilization in a systematic and organized way
 - Available empty containers under single umbrella

Additional Services

- Empty carrier discovery & booking
- Display on the top priority
- Map view
- Easy to search

Integrations: LDB, ICEGATE, PCS

Target Users Shipping line, leasing company, container agents in the logistics segment

ULIP Stakeholders Use-cases

Use-cases: Development by Industry Players

Problem Statement

Solution

Gate Automation



Integrations:
FOS, FASTAG, VAHAN,
SARATHI, ICEGATE

- Ports don't have pre-arrival intimation of vehicles / trains, delaying container handling time.
- Documents checked manually at gates, leading to long queue and waiting time.

- Pre-arrival intimation while trailer crosses last toll plaza, or train crosses last station prior reaching port.
- E-verification of the documents at the gates.

Status verification for Bank remittance



Integrations:
IEC

- IEC status is very critical for the banks for EXIM remittance which is complex in nature. Real-time verification is highly essential for avoiding fraud and compliance issue.

- Through ULIP, bank verifies the current status of the IEC and date of change in status of IEC if any. This helps bank to take decision on EXIM remittance.

Use-cases: Development by Industry Players

Shipment cross-verification with the documents submitted



Integrations:
FASTAG, FOIS, ACCES,
ACMES, AAICLAS

Problem Statement

- Bank's risk management team requires to cross-verify the actual movement of cargo with documents submitted by the borrowing entities. Lack of authenticate data forbids the banks to mitigate risks.

Solution

- Data from FASTAG, FOIS, ACCES, ACMES, AAICLAS empower bank to perform risk evaluation of the customers and can smoothly lend to the logistics players

Secured Logistics Data Exchange



Integrations:
IEC, LDB, FOIS, FASTAG,
VAHAN, SARATHI

- To implement the secured logistics data exchange System, there is a need to authenticate the information from Govt sources.

- ULIP helps the SLDE in verifying the information and provide an end-to-end tracking system

Unified Logistics Interface Platform

An integrated platform for the stakeholders to enhance efficiency, utilize technology, and reduce the cost of logistics in India

[GO TO DATA REQUEST PLATFORM](#)



Thank You